

REMARKS

Claim Status & Amendments

Upon entry of this Amendment, claims 1, 2, 4-6, 8, 9, and 11-23 are pending, of which claim 1 is independent. Claims 3, 7, and 10 were cancelled previously without prejudice or disclaimer of the underlying subject matter. Of the pending claims, claims 1, 2, 4-6, 8, 9, 11-16, 18, and 21 are currently amended. Claim 1 is amended to specify that component b) has a solubility of at least 20 g/L in water at 80°C, and that the mixture has a total weight. Claims 2, 15, 16, 18, and 21 are amended to replace the word “it” with the phrase “said food casing.” Claims 4 and 5 are amended to specify that “the polyamide or copolyamide” refers to component a) of claim 1. Claims 6, 9, and 13 are amended to specify that a component is present in the recited fraction, based on the total weight of the mixture. Claim 8 is amended to recite that component b) is a water-soluble organic polymer, wherein said water-soluble organic polymer is one which swells under action of water or water vapor. Claims 11-13 are amended to depend from claim 1. Claim 14 is amended to recite a water vapor permeability (WVP). Support for the amendments may be found at least at 6:31-7:2, 7:25-28, and 8:30-32 of the Specification as-filed, for example. Thus, no new matter has been added.

Claim Objections

Claims 11-13

Claims 11-13 were objected to for depending from cancelled claim 10. Claims 11-13 have been amended to depend from pending claim 1. Accordingly Applicant respectfully requests reconsideration and withdrawal of this objection.

Rejections Under 35 U.S.C. § 112, second paragraph

Claims 6, 8-9, 11-16, & 18

Claims 6, 8-9, 11-16, and 18 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. This rejection is respectfully traversed.

Regarding claim 6, the Office asserted that “the fraction,” “the component a),” “in each case,” and “the total weight” lack antecedent basis. Claim 6 recites that component a) is present in a

fraction of 40 to 90% by weight, based on the total weight of the mixture. Support for “the component a)” and “the total weight” of the mixture is found in claim 1.

Regarding claim 8, the Office asserted that “the component b)” and “the action of water” lack antecedent basis. Claim 8 recites that component b) is a water-soluble organic polymer, wherein said water-soluble organic polymer is one which swells under action of water or water vapor. Support for “the component b)” is found in claim 1.

Regarding claim 9, the Office asserted that “the fraction,” “the component b),” and “the total weight” lack antecedent basis. Claim 9 recites that component b) is present in a fraction of 10 to 60 % by weight, based on the total weight of the mixture. Support for “the component b)” and “the total weight” of the mixture is found in claim 1.

Regarding claims 11 and 12, the Office asserted that “the inorganic filler” and “the organic filler” lack antecedent basis. Claims 11 and 12 depend from claim 1, which recites “at least one organic or inorganic filler”

Regarding claim 13, the Office asserted that “the fraction of the filler” and “in each case” lack antecedent basis. Claim 13 recites a food casing “wherein component c) is present in a fraction greater than zero but not greater than 40 % by weight, based on the total weight of the mixture.”

Regarding claim 14, the Office asserted that “its water” lacks antecedent basis. Claim 14 has been amended to recite a food casing “having a water vapor permeability (WVP), wherein said WVP”

Regarding claims 15, 16, 18, and 21, the Office asserted that “it is” lacks antecedent basis. In these claims, the word “it” has been replaced with “said food casing,” which finds antecedent basis in claim 1.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 6, 8-9, 11-16, and 18 under 35 U.S.C. § 112, second paragraph.

Rejections Under 35 U.S.C. § 102(b)

Claims 11-13, & 22

Claims 11-13 and 22 were rejected under 35 U.S.C. § 102(b) as being anticipated by Andersen *et al.* (U.S. Pat. No. 6,231,970, hereinafter “Andersen”). This rejection is respectfully traversed.

Because claims 11-13 depended from cancelled claim 10, the Office interpreted them as independent claims. The Office cited Andersen for allegedly teaching a “tubular food casing having inorganic fillers such as titanium dioxide and glass fibers or organic fillers such as carbohydrates, polysaccharides, and/or a derivative thereof.”¹

Claims 11-13 now depend from claim 1; claim 22 still depends from claim 12. Thus, the instant claims all require “a) at least one aliphatic polyamide and/or aliphatic copolyamide, b) at least one thermoplastic other polymer or copolymer, wherein the thermoplastic other polymer or copolymer is hydrophilic and/or water-soluble, c) at least one organic or inorganic filler, and d) at least one additive selected from a dye or a color pigment.” Because Andersen does not teach each and every element as set forth in the claim, the subject matter of claims 11-13 and 22 is not anticipated by Andersen. Accordingly, Applicant respectfully requests that the Office reconsider and withdraw the rejection of claims 11-13 and 22 under 35 U.S.C. § 102(b) as anticipated by Andersen.

Rejections Under 35 U.S.C. § 103(a)

Claims 1, 2, 4-6, 8, 9, 11-15, 17, 19, 20, & 22

Claims 1, 2, 4-6, 8, 9, 11-15, 17, 19, 20, and 22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hisazumi *et al.* (US 4,764,406, hereinafter “Hisazumi”), in view of Andersen and Delius *et al.* (US 2002/0065364, hereinafter “Delius”). This rejection is respectfully traversed.

The Office cited Hisazumi for allegedly teaching a smoke and water vapor permeable tubular food casing impregnated with liquid smoke on the food-facing side and having at least one

¹ Office Action, 3 (Jul. 7, 2010).

thermoplastic other polymer or copolymer, wherein the thermoplastic other polymer or copolymer is hydrophilic, water soluble, and swells under the action of water or water vapor.²

Independent claim 1 recites, *inter alia*, at least one thermoplastic other polymer or copolymer, wherein the thermoplastic other polymer or copolymer is hydrophilic and has a solubility of at least 20 g/L in water at 80°C. Neither Hisazumi, Andersen, Delius, or the combination thereof teaches or suggests at least this feature of claim 1.

Hisazumi states that “[t]he tubular films ... were filled with about 200 g of pork sausage meat [and] each sausage was dried in a smoke chamber,”³ but this statement does not teach or suggest that the casing can or should be impregnated with liquid smoke before it is filled with sausage meat. Hisazumi is silent with regard to impregnating a sausage casing with liquid smoke before filling. Hisazumi teaches a casing comprising “a mixture of 45 to 85 wt % of polyamide, 10 to 45 wt % olefin and vinyl alcohol and 5 to 30 wt % polyolefin.”⁴ The mixing ratios of “the mixture falls in the pentagonal range defined in FIG. 1 by linear lines connecting the points A, B, C, D and E, respectively.”⁵

Olefin/vinyl-alcohol copolymers, such as Hisazumi’s ethylene/vinyl alcohol (EVOH) copolymers, are hydrophilic and swellable, but do not have “a solubility of at least 20 g/L in water at 80°C,” as claimed. Thus, Hisazumi neither teaches nor suggests a food casing as claimed.

Applicant submits that neither Andersen nor Delius add anything that would remedy the aforementioned deficiencies in Hisazumi.

Andersen was cited for allegedly teaching a tubular food casing having inorganic fillers for the purpose of providing a casing with swellable materials that are cost effective and easy to process.⁶ Andersen generally teaches sheets, containers, and other articles for packaging beverages and other foodstuffs,⁷ but does not teach or suggest smoke- and water-vapor-permeable food casings. Moreover, Andersen fails to teach or suggest at least one thermoplastic other polymer or copolymer having a solubility of at least 20 g/L in water at 80°C, as claimed.

² See Office Action, 4 (Jul. 7, 2010) (citing Hisazumi at Abstract, col. 3:16-30, and col. 8:12-45).

³ Hisazumi, col. 8:32-37 (Aug. 16, 1988).

⁴ *Id.* at col. 3:17-20.

⁵ *Id.* at col. 3:20-22.

⁶ Office Action, at 5 (Jul. 7, 2010).

⁷ See Andersen, col. 1:16-26 and col. 55:1-28 (May 15, 2001).

Delius was cited for allegedly teaching a sausage casing containing conventional additive pigments for the purpose of providing a moist food/sausage having the desired color.⁸ Delius teaches “[a] polymer blend [having] a coherent phase made from an aliphatic and/or semiaromatic (co)polyamide and, dispersed therein, a phase made from an olefin block copolymer grafted with intramolecular carboxylic anhydrides,”⁹ as well as tubular food casings having at least one layer comprising the polymer blend. The grafted olefin block copolymers of Delius, however, are not at least one thermoplastic other polymer or copolymer having a solubility of at least 20 g/L in water at 80°C, as claimed.

Thus, Hisazumi, Andersen, Delius, and the combination thereof neither teach nor suggest the food casing as claimed.

Claims 2, 4-6, 8, 9, 11-15, 17, 19, 20, and 22 depend from claim 1. Accordingly, Applicant respectfully requests favorable reconsideration and withdrawal of the rejection of claims 1, 2, 4-6, 8, 9, 11-15, 17, 19, 20, and 22 under 35 U.S.C. § 103(a) as being unpatentable over Hisazumi, in view of Andersen and Delius.

Claim 16

Claim 16 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Hisazumi in view of Andersen, Delius, and Okudaira *et al.* (US 6,294,263, hereinafter “Okudaira”). This rejection is respectfully traversed.

The Office noted that Hisazumi, Andersen, and Delius “fail to expressly disclose the casing being biaxially stretched and heat set,”¹⁰ but cited Okudaira for allegedly teaching “a tubular and seamless casing, biaxially oriented and a heat-set polyamide-based food casing for the purpose of providing a fatigue resistant casing.”¹¹

Okudaira, however, fails to add anything that would remedy the aforementioned deficiencies in Hisazumi, Andersen, and Delius. Namely, Okudaira fails to teach or suggest at least one thermoplastic other polymer or copolymer having a solubility of at least 20 g/L in water at 80°C.

⁸ *Id.* at 6.

⁹ Delius, at Abstract (May 30, 2002).

¹⁰ Office Action, at 9 (Jul. 7, 2010).

¹¹ *Id.*

Thus, Hisazumi, Andersen, Delius, Okudaira, and the combination thereof neither teach nor suggest the food casing as claimed.

Accordingly, Applicant respectfully requests favorable reconsideration and withdrawal of the rejection of claim 16 under 35 U.S.C. § 103(a) as being unpatentable over Hisazumi, in view of Andersen, Delius, and Okudaira.

Claims 18 & 21

Claims 18 and 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hisazumi in view of Andersen, Delius, and Hammer *et al.* (US 5,501,886, hereinafter “Hammer”). This rejection is respectfully traversed.

The Office noted that Hisazumi, Andersen, and Delius fail to expressly disclose the casing being shirred and seamless, but cited Hammer for allegedly teaching tubular, seamless, shirred sausage casings.¹²

Hammer, however, fails to add anything that would remedy the aforementioned deficiencies in Hisazumi, Andersen, and Delius. Namely, Hammer fails to teach or suggest at least one thermoplastic other polymer or copolymer having a solubility of at least 20 g/L in water at 80°C. Moreover, Hammer is directed to food casings based on regenerated cellulose, a material which is completely different from and not comparable with the materials of the present invention.

Thus, Hisazumi, Andersen, Delius, Hammer, and the combination thereof neither teach nor suggest the food casing as claimed.

Accordingly, Applicant respectfully requests favorable reconsideration and withdrawal of the rejection of claims 18 and 21 under 35 U.S.C. § 103(a) as being unpatentable over Hisazumi, in view of Andersen, Delius, and Hammer.

¹² *Id.* at 10.

Claim 23

Claim 23 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Hisazumi in view of Andersen, Delius, and Krallmann *et al.* (US 2003/0059502, hereinafter “Krallmann”). This rejection is respectfully traversed.

The Office noted that Hisazumi, Andersen, and Delius fail to expressly disclose wherein the food is a sausage emulsion or raw sausage emulsion, but cited Krallmann for allegedly teaching an encased smoked sausage emulsion.¹³

Krallmann, however, fails to add anything that would remedy the aforementioned deficiencies in Hisazumi, Andersen, and Delius. Namely, Krallmann fails to teach or suggest at least one thermoplastic other polymer or copolymer having a solubility of at least 20 g/L in water at 80°C. Thus, Hisazumi, Andersen, Delius, Krallmann, and the combination thereof neither teach nor suggest the food casing as claimed.

Accordingly, Applicant respectfully requests favorable reconsideration and withdrawal of the rejection of claim 23 under 35 U.S.C. § 103(a) as being unpatentable over Hisazumi, in view of Andersen, Delius, and Krallmann.

Conclusion

In view of the remarks above, Applicant respectfully submits that the stated grounds for rejection have been properly addressed and that all of the claims are patentable, and so request favorable action thereon. The Examiner is invited to contact the undersigned if any additional information is required.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 50-4254, under Attorney Docket No. 2901886-000025.

¹³ *Id.* at 10-11.

Respectfully submitted,

**BAKER, DONELSON, BEARMAN,
CALDWELL & BERKOWITZ, P.C.**

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920 Massachusetts Avenue, N.W.
Suite 900
Washington, DC 20001

Telephone: 202-508-3400
Facsimile: 202-508-3402

_____/C.G. Moore/
Chester G. Moore, Ph.D.
Reg. No. 53,345
Telephone: 985-819-8420

David W. Woodward
Registration No. 35,020